TAMRON®

AF28-200mm

F/3.8-5.6 XR Di Aspherical [IF] Macro



Thank you for purchasing the Tamron lens as the latest addition to your photographic equipment. Before using your new lens, please read the contents of this Owner's Manual thoroughly to familiarize yourself with your lens and the proper photographing techniques for creating the highest quality images possible. With proper handling and care, your Tamron lens will give you many years of photographing beautiful and exciting pictures.

SPECIFICATIONS

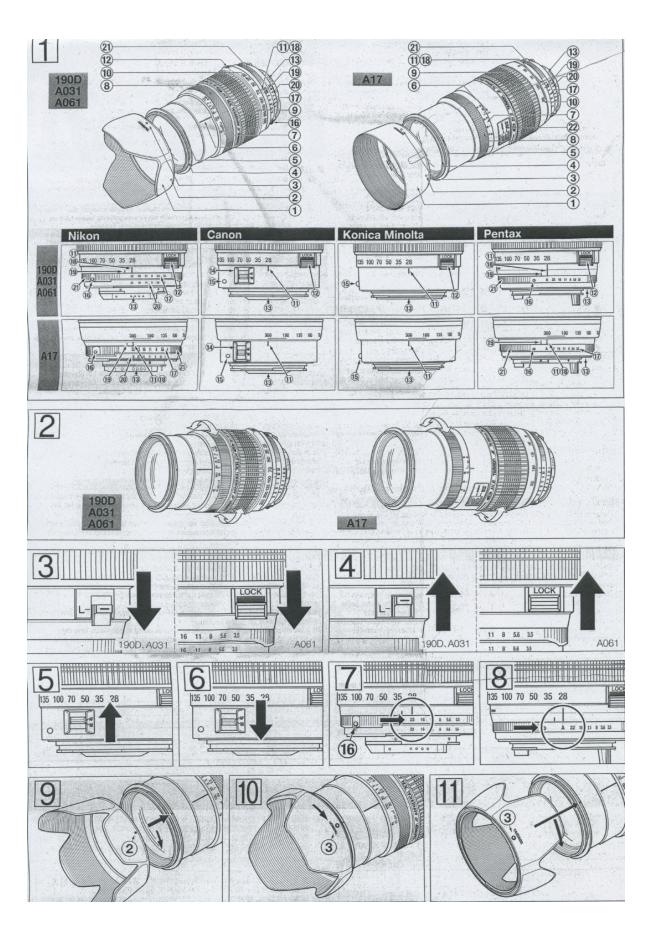
	A031
Focal Length	28-200mm
Maximum Aperture	F/3.8-5.6
Angle of View	75°23' - 12°21'
Lens Construction	14/15
Minimum Focusing Distance	0.49m (throughout the range)
Maximum Magnification Ratio	1:4 (at 200mm)
Filter Size Ø	62mm
Length	75.2 mm
Diameter Ø	71mm
Weight	354g
Lens Hood	AD06

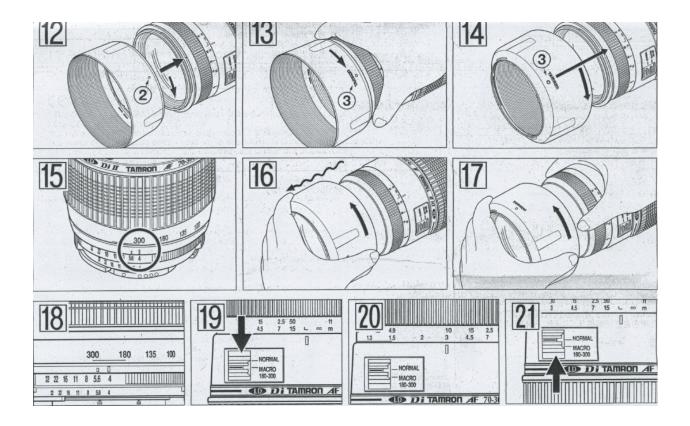
^{*}Lengths and weights listed in specifications are for Nikon lens mounts.

NOMENCLATURE

- 1. Lens Hood
- 2. Hood attaching alignment mark
- 3. Hood attaching indicator
- 4. Filter ring
- 5. Hood attaching bayonet ring
- 6. Distance index
- 7. Distance scale
- 8. Focusing ring
- 9. Zooming ring
- 10. Focal length scale
- 11. Zoom index mark
- 12. Zoom lock switch (Fig. 3 & 4)
- 13. Lens mount/Lens mount contacts (Nikon)
- 14. AF-MF-Switch (Fig. 5 & 6)
- 15. Lens attachment mark
- 16. AE (minimum aperture) lock
- 17. Aperture scale
- 18. Aperture index
- 19. F-number index mark for long focal lengths (Nikon, Pentax)
- 20. F-number scale for finder display (Nikon)
- 21. Aperture ring
- 22. Macro selector switch

^{*}Features and cosmetic designs of lenses listed in this owner's manual may be revised without notice.





ATTACHING LENS TO CAMERA

*How to mount the lens

Removing the rear cap of the lens, align the lens attachment mark on the lens barrel with its counterpart on the lens mount of the camera and insert the lens mount into camera's mount opening. Rotate the lens clockwise until it click-locks. *How to detach the lens

Pressing the lens release button of the camera down, turn the lens counterclockwise (in case of Nikon lens, clockwise), and lift the lens off the camera's lens mount.

**For further details, please read the instruction manual of your camera.

FOCUSING (Autofocus) (Fig. 1 & 2)

Switch the focusing mode of the camera to Auto focusing mode (AF) in case of Nikon, Sony or Pentax. In case of Canon camera, switch the AF/MF switch (14) on the lens to AF. (Fig. 5). Press the shutter button lightly while viewing through the camera's viewfinder, the lens focuses automatically. An in-focus mark will light when lens focuses on the main subject sharply. Press the shutter button further to photograph.

*When set on AF mode, interfering with the focusing ring (8) may cause serious damage to the lens mechanism.

**For further details, please read the instruction manual that came with your camera.

FOCUSING (Manual Focus) (Fig. 1, 2 & 6)

Switch the focusing mode switch of the camera to manual focusing mode (MF) in case of Nikon, Sony or Pentax. In case of Canon camera, switch the AF/MF switch (14) on the lens to MF. *(Fig. 6). Focus by manually rotating the focusing ring while viewing through the camera's viewfinder. The main subject image in the viewfinder will be critically sharp on the viewfinder screen when the lens is focused correctly.

- *Even in the MF mode, turning the focusing ring (8) while pressing the shutter half way the focus aid function lamp lights up when the picture is in focus.
- *At infinity, make sure the image in the viewfinder appears sharp. The infinity position is made with certain allowances to insure proper focus under a variety of conditions.
- **For further details, please read the instruction manual that came with your camera.

ZOOMING (Fig. 1 & 2)

Rotate the zoom ring (9) while viewing through the camera's viewfinder and compose your image at the chosen focal length.

ZOOM LOCK SWITCH (Fig. 3 & 4)

This lens is equipped with a newly developed zoom lock switch mechanism, which prevents the lens barrel from extending toward long focal lengths by their own weight, while hanging off the shoulder, or a chair for example. Activate the switch at 28mm setting to stop the lens barrel from rotating and extending.

How to activate the zoom lock switch mechanism:

- 1. Locking: Set the lens to the 28-mm position. Move the switch (12) toward the camera, until the index lines align with each other. The lens barrel is now locked in position and does not rotate or extend by its own weight.
- 2. Releasing: Push the switch away from the camera. The lens barrel is now free to rotate and extend for zooming.
- *The zoom lock switch (12) cannot be activated unless the lens is set to the 28-mm position. Do not force the lock switch or do not try to rotate the lens barrel while locked.
- *The lens can be used at 28-mm setting for picture taking even when locked by the switch.
- *The zoom lock mechanism is made to prevent the lens barrel from extending while carried around. When not locked, the zoom lens may change its focal length during a long exposure if used while in a low or high angle position.

LENS APERTURE AND AE MODE (Fig. 1, 7 & 8)

Setting lens f-numbers with Canon & Sony cameras

Set the f-number with aperture setting device of the camera body in accordance with the selected photographing mode.

**For further details, please read the instruction manual that came with your camera.

Setting lens f-numbers with Nikon & Pentax cameras

Photographing in a programmed-AE or a shutter-priority AE mode, rotate the lens aperture ring (21) to the minimum aperture setting position, in case of a Nikon camera, and set on the "A" position in case of Pentax camera. The aperture ring will be locked in position automatically. When shooting in aperture priority-AE or manual exposure mode, release the lens aperture ring by rotating the ring from the AE lock position by depressing the Aperture ring lock button.

- *The lens aperture varies with zooming movement. Cameras read the different lens openings and automatically adjust the exposure properly.
- *If your camera is a Nikon F401 or F50, you can set the aperture to any desired fnumber, leaving the aperture ring at the minimum opening position.
- **For further details, please read the instruction manual that came with your camera.

LENS HOOD (Fig. 1, 9 to 11)

A bayonet-type lens hood is provided as a standard accessory. We recommend shooting with the hood attached whenever possible as the lens hood eliminates stray light, which is harmful to the picture. However, please be aware of the precautions written below when your camera is equipped with a built-in flash.

Attaching the lens hood

- 1. Align the index mark on the hood with the index mark on the lens. Place the hood onto the hood's attaching bayonet ring.
- 2. Turn the hood clockwise until it clicks. The index mark on the hood appears at the top when it is correctly attached.
- * Pay particular attention to align the hood attaching indexes when using zoom lenses including wide angle setting. (Ex. 35mm or wider). Improper attachment for wide- angle zoom lenses may cause large shadowed areas in your pictures.

Stowing the lens hood

- 1. Detach and reverse lens hood. Then align the index mark on the hood with the index mark on the lens. Place the hood onto the hood's attaching bayonet ring.
- 2. Turn the hood clockwise until it clicks. The index mark on the hood appears at the top when correctly stowed.

PRECAUTIONS IN SHOOTING

The Tamron lens employs an internal focusing system to achieve a remarkable minimum photographing distance of 0.4 to 0.49 meter (1.31 to 1.61 ft). Because of the characteristics of this optical design, the angles of view at distances other than infinity are wider than that of lenses applying an ordinary focusing system.

When the built-in flash on the camera is used, adverse photographic phenomena such as corner illumination fall-off or vignetting at the bottom part of the image may be observed. This is due to the inherent illumination of the coverage of the built-in flash, and/or the relative position of the flash to the edge of the lens barrel which causes shadows on image. It is strongly recommended to use a suitable separate flash unit

provided by the camera manufacturer for all flash photography.

When using the lens in a telephoto focal range, it may be necessary to use a tripod to avoid camera shake. Using high speed film (ISO 400 or faster) with a fast shutter speed is also helpful to reduce the influence of camera shake.

Do not forcibly turn the focusing ring when the lens is set in AF mode. Doing so could damage the lens and/or camera.

Certain camera models may indicate the maximum and minimum aperture values of the lens as approximate numbers. This is inherent to the design of the camera and not an indication of error.

Please be aware that there is no infrared index line on any models listed in this owner's manual. Therefore practically no black and white infrared film can be used on this lens.

TO ENSURE LONG-TERM SATISFACTION

Avoid touching the glass element surface. Use a photographic lens cloth or blower to remove dust from the lens element surface. When not using the lens, always place a lens cap on it for protection.

Use a lens cleaning tissue or lint cloth with a drop of cleaning solution to remove fingerprints or dirt on the glass lens surface with a rotary motion from the center to the edge. Use a silicon cloth to clean your lens barrel only.

Clean the lens barrel with a silicon cloth. Do not use benzene or paint thinner or other organic cleansers.

Mildew is an enemy of your lens. Clean the lens after shooting near water or in any humid place. Store your lens in a clean, cool and dry place. When storing the lens in a lens case, store it with commercially available drying agent such as silica gel, and change the agent occasionally. If you find mildew on your lens, consult an authorized repair shop or nearby photographic store.

Do not touch the lens-camera mount contacts since dust and/or dirt stains may cause a contact failure between the lens and camera.

When using your equipment in an environment where the temperature changes from one extreme to the other, make sure to put your equipment temporarily in a case or plastic bag for a length of time in order to go through a gradual temperature shift. This will reduce potential equipment trouble.